

Fig. 2

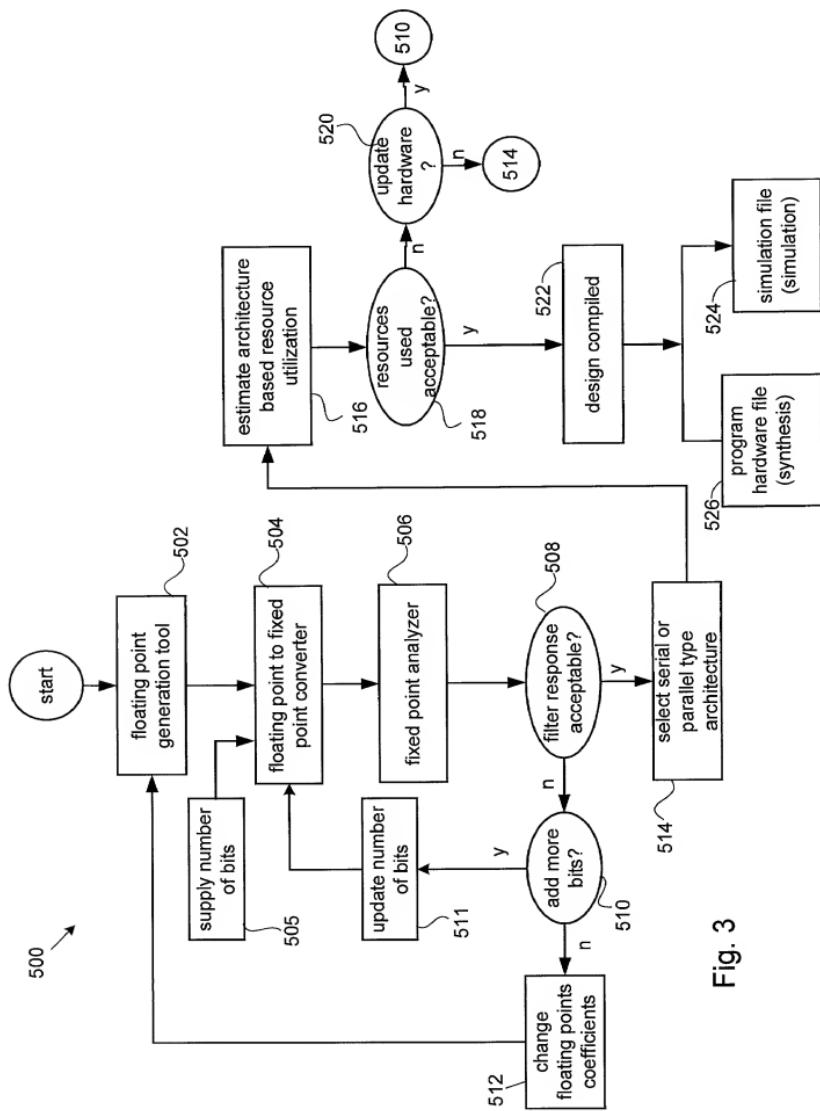


Fig. 3

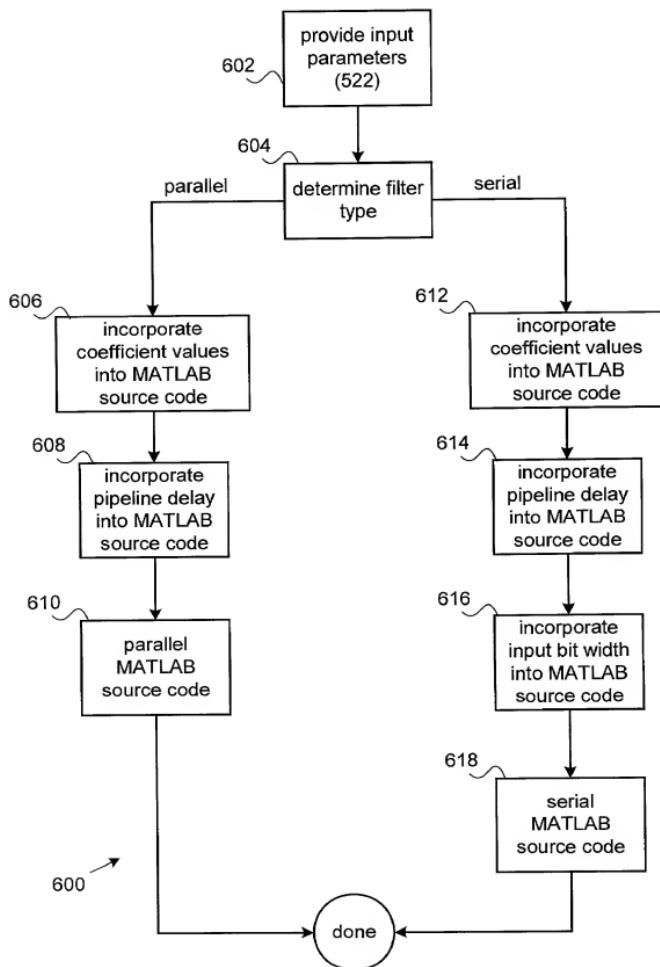
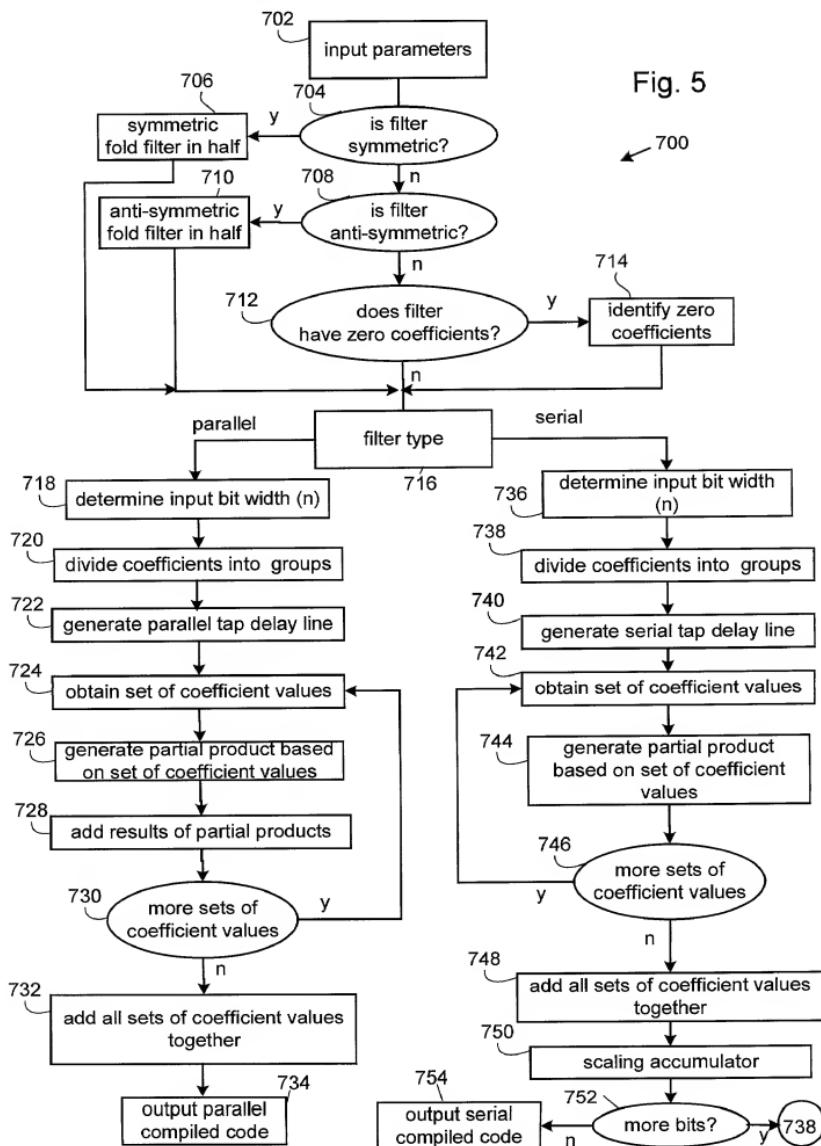


Fig. 4



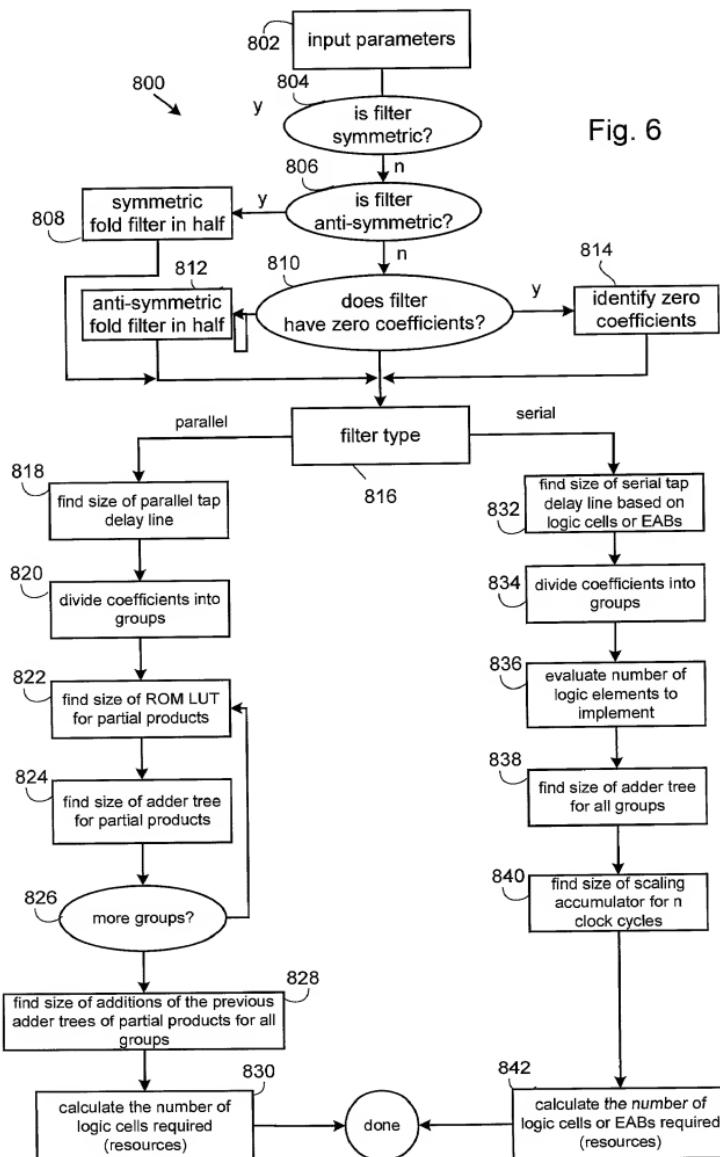
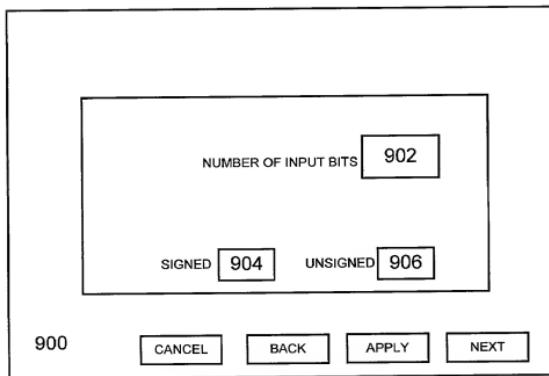


Fig. 6



INPUT DATA BUS PARAMETERS

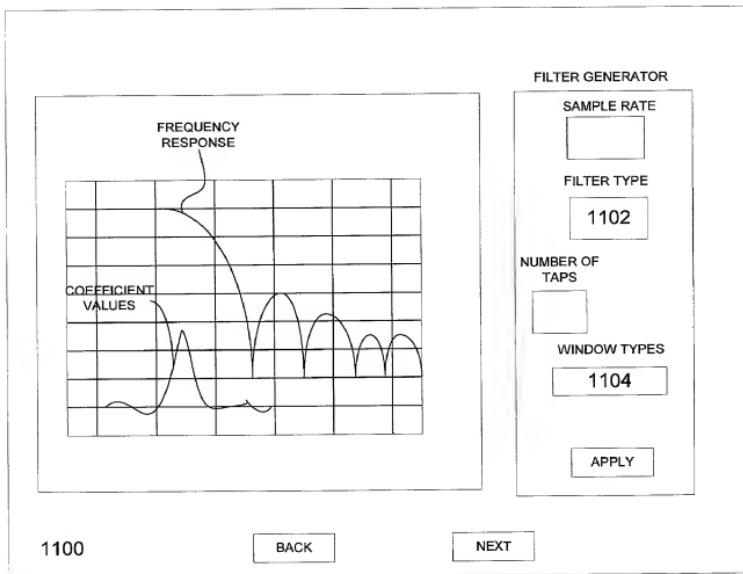
Fig. 7

1000

GENERATE COEFFICIENT VALUES	1006	READ COEFFICIENTS FROM FILE	1004	ANALYZE FIXED POINT COEFFICIENTS
<b>FLOATING POINT TO FIXED POINT CONVERSION</b>				
<input type="radio"/> NO CONVERSION				
<input type="radio"/> SCALE TO USE UP TO <input type="text"/> BITS OF PRECISION				
<input type="checkbox"/> USE ONLY POWER OF TWO SCALING FACTORS				
<input type="radio"/> SCALE BY FACTOR OF <input type="text"/>				
SYMMETRY TYPE				
<input type="text"/> 1010				
COEFFICIENT VALUES				
<input type="text"/> 1002				
<input type="text"/> 1008				
<input type="text"/> 1000		<input type="button" value="CANCEL"/>	<input type="button" value="BACK"/>	<input type="button" value="NEXT"/>

SPECIFY COEFFICIENTS

Fig. 8



SCALED AND ROUNDED COEFFICIENTS

Fig. 9

GENERATE COEFFICIENT VALUES

READ COEFFICIENTS FROM FILE

ANALYZE FIXED POINT COEFFICIENTS

FLOATING POINT TO FIXED POINT CONVERSION

NO CONVERSION

SCALE TO USE UP TO  BITS OF PRECISION

USE ONLY POWER OF TWO SCALING FACTORS

SCALE BY FACTOR OF

SYMMETRY TYPE

POSITIVE SYMMETRY

COEFFICIENT VALUES

XXX.XX

XXX.XX

XXX.XX

XXX.XX

CANCEL BACK APPLY NEXT

1200

SPECIFY COEFFICIENTS

Fig. 10

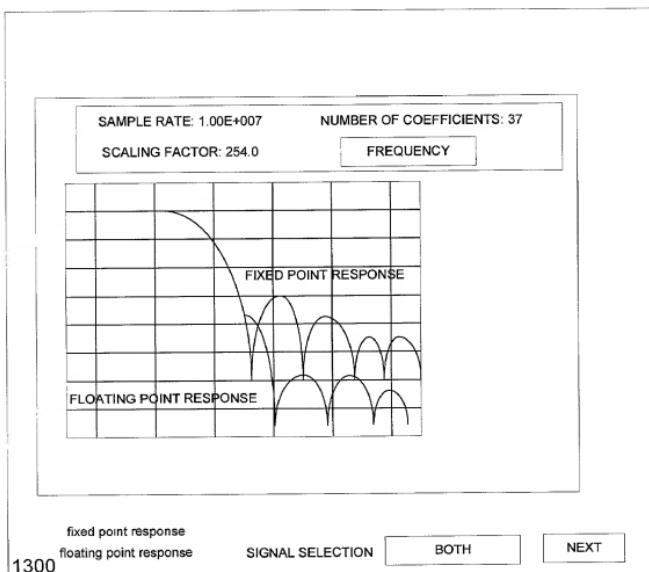


Fig. 11

OUTPUT RESOLUTION (YOUT)

FULL PRECISION  LIMITED PRECISION

MSB

1 BITS REMOVED FROM MSB  
 SATURATE  TRUNCATE

LSB

1 BITS REMOVED FROM LSB  
 ROUND  TRUNCATE

1400

SPECIFY FILTER PRECISION

Fig. 12

DECIMATION

DECIMATION FACTOR

INTERPOLATION

INTERPOLATION FACTOR

CANCEL   BACK   APPLY   NEXT

1500

SPECIFY DECIMATION OR INTERPOLATION

Fig. 13

ARCHITECTURE

NUMBER OF INPUT CHANNELS

PARALLEL IMPLEMENTATION

SERIAL IMPLEMENTATION

PIPELINING OPTIONS

SPEED OPTIMIZED

AREA OPTIMIZED

ESTIMATED RESOURCES OPTIONS

SIZE ESTIMATE	180 LOGIC CELLS	1602
	3 DUAL PORT ESB/EAB	
COMPUTATION TIME	4 CLOCK CYCLES PER INPUT	
	4 CLOCK CYCLES PER OUTPUT	

1600

SPECIFY FILTER ARCHITECTURE

Fig. 14

SIMULATION OUTPUT FILES	
<b>SIMULATION CLOCK PERIOD</b> <div style="border: 1px solid black; padding: 5px; display: inline-block;">40 NS</div>	<b>FILE FORMAT</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> MAX+PLUS2 VECTOR FILE</li> <li><input type="checkbox"/> MATLAB SIMULINK MODEL</li> <li><input type="checkbox"/> MATLAB TESTBENCH MODEL</li> <li><input type="checkbox"/> VERILOG MODEL</li> <li><input checked="" type="checkbox"/> VHDL MODEL</li> </ul>
<input type="button" value="CANCEL"/> <input type="button" value="BACK"/> <input type="button" value="APPLY"/> <input type="button" value="NEXT"/>	

## CHOOSE OUTPUT FILE TYPES

Fig. 15

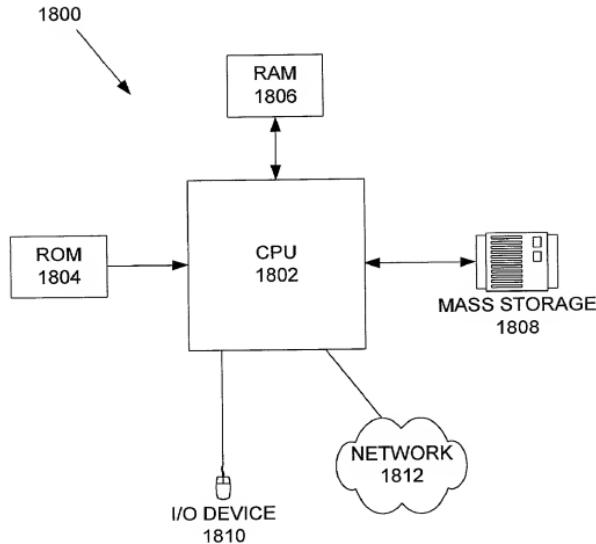


Fig. 16